

REMARKS

This application has been reviewed in light of the Office Action dated December 15, 2005. Claims 1 and 4 are presented for examination, of which Claim 1 is in independent form. Claim 1 has been amended to define still more clearly what Applicant regards as his invention. Favorable reconsideration is requested.

As stated in the September 20, 2005 Amendment, an Information Disclosure Statement and a corresponding Form PTO-1449 was filed on March 25, 2002, as evidenced by the returned receipt postcard bearing the stamp of the Patent and Trademark Office, a copy of was attached to the September 20, 2005 Amendment. Applicant respectfully requests the Examiner to return an initialed copy of the Form PTO-1449, indicating the reference cited thereon was considered.

Claim 1 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,927,792 (Mimura) in view of U.S. Patent No. 4,441,123 (Ochi); and Claim 4 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Mimura, in view of Ochi, and in further view of U.S. Patent No. 5,760,852 (Wu et al.).

As shown above, Applicant has amended independent Claim 1 in terms that more clearly defines what he regards as his invention. Applicant submits that this amended independent claim, together with the remaining claim dependent thereon, are patentably distinct from the cited prior art for at least the following reasons.

Claim 1 is directed to an image pickup apparatus including an output unit which outputs a first electric signal corresponding to a first light flux included in light fluxes respectively from different areas dividing an exit pupil area of an imaging optical

system, and a second electric signal corresponding to a second light flux different from the first light flux, included in the light fluxes. Also included are a plurality of pixel units each including a first sensitive area for outputting the first electric signal, and a second sensitive area for outputting the second electric signal. A sensitivity distribution of the first sensitive area and a sensitivity distribution of the second sensitive area overlap each other.

Mimura relates to a television camera which includes an optical system (see Fig. 1, items 1-3) and image pickup sensors 4 (see Fig. 1). The optical system includes a lens 1, an iris section 2 and a prism-type three-color separation optical system 3. Light passing through lens 1 and iris 2 enters prism system 3 where it is separated into three different wavelength light components R, G and B, which are then incident onto three image pickup sensors 4r, 4g and 4b, respectively. Thus, Mimura discusses separating light into different wavelength light components after the light passes an exit pupil. Applicants have found nothing in Mimura, however, that would teach or suggest “an output unit which outputs a first electric signal corresponding to a first light flux included in light fluxes respectively from different areas dividing an exit pupil area of an imaging optical system, and a second electric signal corresponding to a second light flux different from the first light flux, included in the light fluxes,” as recited in Claim 1 (emphasis added).

In addition, as admitted in the Office Action (pages 2-3), Mimura fails to teach “a plurality of pixel units each including a first sensitive area for outputting the first electric signal, and a second sensitive area for outputting the second electric signal,” as recited in Claim 1. It follows, therefore, that Mimura fails to teach that “a sensitivity

distribution of the first sensitive area and a sensitivity distribution of the second sensitive area overlap each other,” as recited in Claim 1.

The disclosure of Ochi does not remedy the deficiencies of Mimura. Ochi relates to a solid state color imager for the purpose of eliminating moire fringes. Ochi does not expressly disclose an optical system of an image pickup device and, therefore, does not teach or suggest “an output unit which outputs a first electric signal corresponding to a first light flux included in light fluxes respectively from different areas dividing an exit pupil area of an imaging optical system, and a second electric signal corresponding to a second light flux different from the first light flux, included in the light fluxes,” as recited in Claim 1. Ochi is cited as disclosing a plurality of pixel units, each having a first sensitive area outputting the first electric signal and a second sensitive area for outputting the second electric signal, wherein the areas corresponding to red and green pixels in adjacent columns overlap (see Office Action, page 3). Ochi discusses that R and B pixels in adjacent columns overlap (see Fig. 4). However, Applicant has found nothing in Ochi that would teach or suggest that “a sensitivity distribution of the first sensitive area and a sensitivity distribution of the second sensitive area overlap each other,” as recited in Claim 1.

Accordingly, Applicant submits that Claim 1 is patentable over Mimura and Ochi whether considered separately or in any permissible combination (if any).

A review of the other art of record has failed to reveal anything which, in Applicant’s opinion, would remedy the deficiencies of the art discussed above, as a reference against Claim 1.


The other claim in this application is dependent from Claim 1 discussed above and is therefore believed patentable for the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual reconsideration of the patentability of each on its own merits is respectfully requested.

This Amendment After Final Action is believed clearly to place this application in condition for allowance and, therefore, its entry is believed proper under 37 C.F.R. § 1.116. Accordingly, entry of this Amendment After Final Action, as an earnest effort to advance prosecution and reduce the number of issues, is respectfully requested. Should the Examiner believe that issues remain outstanding, it is respectfully requested that the Examiner contact Applicant's undersigned attorney in an effort to resolve such issues and advance the case to issue.

In view of the foregoing amendments and remarks, Applicant respectfully requests favorable reconsideration and early passage to issue of the present application.

Applicant's undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,


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